

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025466**Date Inspected:** 03-Aug-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Fred Von Hoff**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above.

This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Orthotropic Bridge Girder (OBG) Sections:

10E-PP88-E3 LLH-#3 : This QA Inspector randomly observed ABF welding personnel Salvador Sandoval (#2202) was about to begin using the Shielded Metal Arc Welding (SMAW) process in the flat (1G) position outside this OBG section to tack weld the plate. This QA Inspector observed QC Inspector Fred Von Hoff perform and accept the fit up of the #3 plate this morning. This QA Inspector observed the offset between the plate and the deck was minimal (0-1 mm) and that the root opening appeared to be approximately 4-5 mm wide. This QA Inspector used an electronic temperature gauge to verify the preheat temperature was greater than 150°F. This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) using a 3.2 mm diameter E7018H4R electrode to weld the root pass. This QA Inspector observed QC Inspector Fred Von Hoff verify the following welding parameters: 135 amperes. This QA Inspector randomly observed QC Inspector Fred Von Hoff periodically monitoring the work at this location. This QA Inspector observed several different sized electrodes were being used; as the weld joint widened the electrode diameter increased. This QA Inspector observed QC Inspector Fred Von Hoff verify the following parameters; 160 amperes for a 4.0 mm diameter and 280 amperes for a 4.8 mm diameter electrode. The welding observed this date appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU.

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10E-PP92-E4 LLH-#2 and #4 : This QA Inspector randomly observed ABF welding personnel Mike Jiminez (#4671) using the carbon arc process to back gouge the welds in the overhead (4G) position inside this OBG section. QC Inspector Fred Von Hoff informed this QA Inspector the Magnetic Particle Testing (MT) performed on the back gouged areas of each weld was accepted. This QA Inspector randomly observed as ABF welding personnel Mike Jiminez (#4671) preheated the weld and started using the Shielded Metal Arc Welding (SMAW) process in the overhead (4G) position. This QA Inspector observed QC Inspector Fred Von Hoff verify the preheat temperature and the following welding parameters; 130 amperes using a 3.2 mm diameter E7018H4R electrode. The welding observed appeared to comply with ABF-WPS-D15-1050A-CU. This QA Inspector periodically observed QC Inspector Fred Von Hoff monitoring the welding at this location.

This QA Inspector had a conversation with QC Inspector Bonifacio Daquinag Jr. regarding the status of QC inspections and what was ready for QA verification; it appeared that QA was current with all areas.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted below there were no notable conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
